

# **PARTICIPATION-GAME SYSTEM INCLUDING AN END-OF-GAME EVALUATION MEANS**

## **Cross-Reference to Related Applications**

[0001] This application is a Continuation-In-Part Application, and therefore claims **priority** of U.S. Application no. 10/364,673 filed on February 12, 2003 and entitled REVERSE-ORDER GAME PLAY APPARATUS. The whole content of said application is incorporated by reference into the present application.

## **Field of the Invention**

[0002] The invention relates to a gaming method and a gaming system for the play of a game with many players participating in the same game until the occurrence of a winner.

## **Background of the Invention**

[0003] Wagering games are very popular nowadays, and the game creators compete to find new game methods, systems and features to attract and to interest players while staying in the desired game category.

[0004] Two such categories are bingo and lotto. Bingo and lotto games are very popular. They offer to players a competition among themselves to determine a winner and depend on a random result (ball draw) for the determination of said winner. To play these games, players are required to purchase cards, to wait for the draw to occur, and to compare their cards with the draw for determination of a winning prize. This process requires time, whereas players demand games wherein determination of their wins should become available more and more rapidly, and ideally upon purchase of the card.

[0005] To resolve such problems, Lind et al. have filed a U.S. patent application entitled METHOD AND PROGRAM PRODUCT FOR PRODUCING AND USING GAME PLAY RECORDS IN A BINGO-TYPE GAME, U.S. patent application

no 10/028,889, filed on December 20, 2001. In this patent application, Lind demonstrates how to generate bingo cards and a bingo draw in a back office; to evaluate them based on criteria; to store them on a server; and to provide them in random order to players on gaming terminals.

[0006] Accordingly, there is a need in this field for improvement, and the invention provides such improvement in a particular way.

### **Objects of the Invention**

[0007] Accordingly, an object of the invention is to provide a method and a system to play a game that depends on the comparison of players' personal objects (hereinafter called game cards) provided by the game with a common object (hereinafter called draw result) remaining in effect until the occurrence of a game win.

[0008] Another object is to provide a bingo and lotto gaming system wherein no control is applied to the game, and therefore wherein the legitimacy of the game is undisputable. Furthermore, there is a need for a game that will be played until a winner is determined. Moreover, this game should include a winning prize and a plurality of participation prizes, wherein the goal of the participation prizes is to maintain the players' interest.

[0009] Another object is to provide said player with a winning prize in response to said occurrence of a game win.

[0010] Another object is to provide a plurality of participation prizes that are available from the start of the game to said occurrence of a game win.

[0011] Another object is to provide a system and method guaranteeing an environment wherein competition among players is available to determine which one of said players will be the winner.

[0012] Another object is to offer a system wherein some information are not generated, evaluated, or provided before the start of the game.

[0013] Another object is to provide a game wherein players must complete an action for activating their participation in the game. Accordingly, a player only buying a personal object for playing the game but not completing an evaluation of said personal object would “sleep on” the game and therefore automatically forfeit his potential wins.

[0014] Another object is to provide a system offering alternatives in its embodiments. Accordingly, an embodiment may strongly differ from another while following the same method herein described.

[0015] Finally, the ultimate object of the invention is to fulfill any objects not included in the above-listed objects but that anyone can understand while reading the appended claims.

### **Summary of the Invention**

[0016] Accordingly, the invention consists in a method of playing a participation game among a plurality of players. The method involves comparing players' objects (a.k.a. game cards) with a common object (a.k.a. draw result) remaining the same until the end of the game. In the context of the game, a common object can be seen as a playing card and can consist in any medium bearing gaming information that the goal is to be compared with comparison information to determine its value. Such game card may include paper-based cards and electronic data. In the same manner, a common object or draw result includes any information used for comparison to determine a game card value. Examples of such draw results are: bingo draws, lotto draws, electronically generated gaming information, etc.

[0017] The method hereinafter described consists in the player placing a request for a play of the game. Upon reception of this request, the system provides the player with a game card and the active draw result. The system compares the game card and the draw result to evaluate fulfillment of an end-of-game criterion. When such criterion is fulfilled, the game card is a winning card and the system

prevents the distribution of new cards. Otherwise, the system is free to continue providing cards until the criterion is fulfilled.

[0018] A suitable system according to the present invention includes a memory space for storing the draw result, with the information stored in this memory remaining unchanged until the end of the game. It also includes a means to generate draw results. Another part of the system is the module handling players' requests and responding to said requests. An end-of-game evaluation means completes the system by evaluating each combination of game card and draw result when responding to players request and therefore changing the state of the game (usually ending the game) when needed.

[0019] The method and system of the invention includes other characteristics, not necessary required to fulfill the goal of the invention, that are included in the following description and the appended claims.

### **Brief Description of the Drawings**

[0020] These and other aspects and advantages of the present invention will become better understood in light of the following detailed description of preferred embodiments with reference to the accompanying drawings, in which:

[0021] Figure 1 is a schematic block diagram illustrating a game distribution system in accordance with a suitable embodiment of the invention;

[0022] Figure 2 is a schematic block diagram illustrating the game distribution system components;

[0023] Figure 3 is a schematic block diagram illustrating gaming apparatus components;

[0024] Figure 4 is a flow chart illustrating steps of the method associated with the play of the game in accordance with an embodiment of the invention;

[0025] Figure 5 is a flow chart illustrating card generation;

[0026] Figure 6 is a flow chart illustrating end-of-game evaluation and result;  
and

[0027] Figure 7 is a flow chart illustrating draw generation.

## **Detailed Description of the Invention**

### **System Description:**

[0028] A preferred embodiment for the implementation of the invention, illustrated on Figure 1, includes a central server, thereafter called game distribution system 10, a network and network-related components, thereafter called communication means 12, and a series of gaming apparatus 14.

[0029] The game distribution system 10, as shown in Figure 2, is a central system used for the generation and distribution of gaming information that are provided to the players on their gaming apparatus. The game distribution system can be divided in three sections: a distribution section 20, a card section 40 and a draw section 30.

[0030] The draw section 30 includes a draw register 32, in which the draw used for the game evaluation is kept; random number generator means (hereafter called a RNG means 34) providing data for draw generation; draw generation means 36 that receives data from the RNG means 34 and generates a draw result that is stored in the draw register 32; and draw communication means 38 that handles draw-related tasks, such as initiation of a new draw or communication of a draw result.

[0031] The card section 40 includes RNG means 42; card generation means 44 that creates game cards based on data provided by the RNG means 42; card validation means 46 that evaluates whether a generated game card has already been generated in relation to the current draw and that commands the generation of

a new card in the case of a positive evaluation; and card communication means **48** that handles other card-related tasks, such as card request and communication. Commonly, a draw result is composed of a set of numbers, with the game card bearing also numbers. In a bingo game, a typical game card bears 24 numbers, while the draw result comprises about 50 numbers.

[0032] The distribution section **20** is composed of request handling means **22** that receives game requests from gaming apparatus **14**, that requests a draw result and a game card according to said request, and that provides card and draw information to the requesting gaming apparatus and, for the evaluation of the end of the game, to the end-of-game evaluation means **24**. The distribution section **20** is also composed of said end-of-game evaluation means **24**, which compares draw information with game card information to identify fulfillment of an end-of-game criterion. Upon positive evaluation of said criterion, said end-of-game means **24** signals the end of the game to the draw communication means **38**, the draw communication means prevents the current draw to be associated with any new game card. An archiving means (not shown) can record any information provided by the system to eventually produce audits of the system. This archiving module may, for instance, record time, destination, values, and any other valuable information related to the play of the game. Afterwards, depending on the needs, this information may be stored on a permanent medium, such a CD-Rom,

[0033] The gaming apparatus **14** illustrated on figure **3**, on the other hand, is a remotely linked device on which the players play the game. Each gaming apparatus **14** is composed of credit-related means **52**, for the insertion, handling, monitoring and redemption of players' credits; player's controls **53**, which allow the player to input game-related information such as game level, game title selection, evaluation command, redemption request, etc; a screen **54** that provides a graphic interface for the player's selections and graphical representation of the game; gaming computing means **58** completing game-related tasks and controls, such as participation prize evaluation and game representation generation; and gaming communication means

**55** communicating requests to the game distribution system **10** (Figure **1**), communicating other game-related information such as particular game states, and receiving information in response to said requests. Communications to and from the game distribution system **10** take place via communication means **12**.

**Method Description:**

[0034] Now referring to Figure **4**, on the gaming apparatus, the player inserts credits; selects a game title, a game level, etc; and activates PLAY. Upon completion of this series of player inputs **60**, the gaming apparatus sends to the game distribution system **10** a request for information for a corresponding play at step **62**.

[0035] At step **64**, the game distribution system **10**, upon reception of said request, demands a corresponding draw result from the draw section **30**, which is generated if no draw result is available, demands a corresponding game card from the card section **40**, and transmits these information to the end-of-game evaluation means **24** and back to the requesting gaming apparatus **14**.

[0036] Upon reception of game-distribution-means information, the gaming apparatus **14** displays a representation of the game on the gaming apparatus screen **54** compares game card information with the corresponding draw result information (step **66**), and, at step **70**, awards corresponding winning prize and/or participation prizes to the player when applicable.

[0037] Now referring to Figure **5**, in response to request for a game card, the card generation means **44** receives, at step **80**, data from the RNG means **42**; uses these data to generate a game card (step **82**), validates this game card for the current draw (step **84**), and provides the requested game card (step **86**). The step **82** of card validation guarantees that no duplicate game card is provided to players. If a game card bearing identical information has already been provided, a new game card has to be generated and validated.

[0038] Now referring to Figure 6, when the end-of-game evaluation means 24 receives a card and a draw (step 90), it compares them in regard to an end-of-game criterion (step 92). If the comparison corresponds to an end-of-game criterion, the end-of-game evaluation means 24 orders, at step 94, the draw section 30 to prevent any new use of said draw and to generate a new draw for the corresponding gem title, thus initiating a new game of said game.

[0039] Now referring to Figure 7, upon receipt of a new draw signal from the end-of-game evaluation means (step 100), the draw generation means 36 generates a new draw (step 102), using data from the RNG means 34 (step 104), and stores said draw result in the draw register 32 (step 106). New draw requests associated with said game title are answered only after said new draw has been stored.

#### **Available Alternatives:**

[0040] An addition to the above-described method is to require an active participation of the players to the game. Accordingly, the addition to the method is to invite the players to complete a validation of their card upon receipt of the card and display of the draw result. If the player does not respond to the invitation within a predetermined delay, the player "sleeps on" his play, and therefore automatically forfeits his potential wins. If the player commands his card evaluation, through a general command such as touching the touch screen control or an evaluation button for instance, the gaming apparatus 14 evaluates, for the player, the card by comparing it with the draw, determines the prize, and awards this prize to the player.

[0041] If the evaluated game card fulfills the end-of-game criterion, the player is designated the winner. Accordingly, the gaming apparatus 14 sends a signal to the game distribution system 10, which ends the game by preventing a new association of a game card with the current draw. However, until the player receiving a card bearing the end-of-game criterion evaluates his card, therefore the player's gaming apparatus signal the win, the system stays in an idle mode, preventing the distribution of new cards. If the player does not evaluate his card within the



predetermined delay, the played card is declared being “slept on” the game, and the system resumes distributing cards.

[0042] In consequence, a player must both receive a winning card and evaluate the winning card to be declared the winner, therefore automatically ending the game.

[0043] Another alternative is to use a draw means (not shown) separate from game distribution system **10** to generate said draw. For instance, the draw means may be an electromechanical bingo blower (not shown). Accordingly, the game distribution system **10** would not include said draw generation means **36** and RNG means **34**. Said bingo blower would complete the same tasks and be in communication with said game distribution system **10**, which would register the draw result and signal said bingo blower when a new draw result has to be generated.

[0044] Following the same principles and the same method, an alternative to the described game distribution system **10** is to include a card storage means (not shown) in which a series (or set) of cards to be played are stored in advance, ready for distribution. These cards may or may not be evaluated by the end-of-game evaluation means **24** prior to their distribution. If they are evaluated, each card triggering the end of the game is associated with a flag.

[0045] Additionally, the system may include a card monitoring means (not shown), particularly when game cards are stored in the system. The object of the card monitoring means is to validate the game so that it may end. Another goal is to increase the speed at which the end-of-game evaluation means determines if an association of a draw result with a game card fulfills the end-of-game criterion. The card validation means verifies, independently of the distribution of the game cards, which game cards fulfills the end-of-game criteria in association with a draw result. It stores this information, and transmits this information to the request handling means with the game card. Accordingly, when receiving draw results and game cards, the

end-of-game evaluation means only needs to verify this particular information to establish a game win.

[0046] Furthermore, the card monitoring means keeps track of the distributed game cards that fulfill the end-of-game criterion. In case of a play having to be validated by a player to be effective, the card monitoring means informs the request handling means when the last game card fulfilling the criterion is distributed. Consequently, the whole system enters a special mode waiting indefinitely for this last game card to be validated by a player; i.e., to establish a winner.

[0047] An additional characteristic the system may take in a realization is to store a series of draw results, each one of these draw results being associated to a request on the basis of one or a set of particular characteristics of the request. For instance, a draw result may be associated with a game when played at a minimum bet level. However, for the same game, a second draw result may be associated with game cards when these cards are played at the maximum bet level. Accordingly, even if the two above examples uses the same game, they are processed by the system as independent game, therefore each of them using a different draw result stored in the system.

[0048] A characteristic of the game distribution system **10** is its ability to provide a series of prizes of variable values. These prizes are awarded upon evaluations that fulfill prize criteria. These prizes may range in value from low to high, and even include jackpots. The high prize value is not automatically associated with the end-of-game criterion. For instance, a jackpot prize may be associated with a criterion occurring on average every  $n$  winners, wherein  $n$  is more than 2.

[0049] Another characteristic that the game distribution system **10** may present is to provide an end-of-game criterion that may result in one prize that cannot differ. An example of this situation is a lotto game wherein a match of the first three digits is necessary to find a winner. If only the first three digits are evaluated, the value of the prize the player wins may vary according to whether more than three digits are

matched. In consequence, an evaluation of all the lotto digits is completed with the criterion being a perfect match for the first three digits and a no-match for the remaining digits.

[0050] Accordingly, while the invention has been described in connection with the specific embodiment thereof and the disclosed alternatives, it will be understood that modifications are available. It is the intent to cover any variations, uses, or adaptations of the invention following, in general, the principles of the invention. Such covered applications will find their essential features herein set forth in the scope of the appended claims.